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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/735,924

12/16/2003

Takayuki Iida

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EXAMINER

ABDI, AMARA

ART UNIT

PAPER NUMBER

2624

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12/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/735,924	Applicant(s) IIDA, TAKAYUKI	
	Examiner Amara Abdi	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/16/2003</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. Applicant's response to the last office action, filed September 26, 2007 has been entered and made of record.
2. In view of the Applicant Arguments, the objection to the drawing is expressly withdrawn.
3. In view of the Applicant amendments, the objection to the Specification is expressly withdrawn.
4. In view of the Applicant Arguments, the objections to claims 5 and 10 are expressly withdrawn.
5. In view of the Applicant amendments, the rejection of claims 14-15 under 35 U.S.C § 101 is expressly withdrawn.
6. In view of the Applicant Arguments, the rejection of claim 8 under 35 U.S.C § 112 is expressly withdrawn.

**Remarks:**

7. Applicant's arguments with respect to claims 1-15 have been fully considered but they are not persuasive.

The Applicant argues that he submitted a verified English translation of the priority document JP 2003-40888 whose Japanese filing date is February 19, 2003, thereby perfecting priority.

However, in response to applicant's argument, the Examiner has carefully reviewed all the submitted documents on September 18, 2007, and has not found any

submission of the verified English translation of the priority document JP 2003-40888 whose Japanese filing date is February 19, 2003. Therefore, the Applicant arguments are not persuasive. As result, the Examiner maintains the rejection.

8. Newly submitted claims 16-17 directed to an invention that is independent or distinct from the invention originally claimed for the following reason:

Claims 1-15 and 18 may be classified as a group I, classified in class 348, subclass 207.99; and are distinct from claims 16-17 which may be classified as group II, which are classified in class 382, subclass 108. Groups I and II are related as combination and subcombination useable together.

Since applicant has received an action on the merits for the originally presentation for prosecution on the merits. Accordingly, claims 16 and 17 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142 (b) and MPEP § 821.03.

**Claim Rejections - 35 USC § 103**

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-3, 5-6, 8-12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kito (US 6,628,899) in view of Enomoto (US-PGPUB 2003/0142285).

**(1) Regarding claims 1, 9, and 18:**

Kito disclose an image processing system (column 1, line 14), and method (column 6, line 42), comprising:

a storage component (20 in figure 1A) in which information indicating a rate of occurrence of a pupil region having undesirable color tone (column 8, line 11-12), (the pupil region having undesirable color tone is read as image data in association with the information) which information is obtained by correcting the undesirable color tone of the pupil region for an image in which the pupil region exists among a large number of images (column 13, line 43-44) obtained by photographing the subject using a photographing device (16 in figure 1A, column 8, line 5-6), is stored for each type of photographing device (column 8, line 10-15), (the storage component is read as an image memory); and

an image processor (26 in figure 2), wherein the image processor includes:

a detecting component (12 b in figure 8) which detects the type of the photographing device of an image to be processed (column 14, line 15-17), which image is obtained by photographing the subject using the photographing device (16 in figure 1A, column 8, line 5-6), (the detecting component is read as the ID card) ;

an acquisition component (52 in figure 8) which acquires, from the storage component (memory), information corresponding to the type of the photographing device detected (ID information) by the detecting component (column 15, line 25-29), (the acquisition component is read as the controller); and

a processing component (26 in figure 1B) which, when it is determined that the probability that the pupil region having undesirable color tone exists in an image to be processed is a predetermined value (column 13, line 32-35), (the probability is read on the image processing condition) or more based on the information acquired by the acquisition component (column 15, line 25-29), carries out searching for the pupil region having undesirable color tone in the image to be processed (column 8, line 37-38), (the searching for the pupil region is read on the processing of the image), and processing for correcting undesirable color tone of the pupil region (column 13, line 43-53) extracted by the searching (column 23, line 6-9).

Kito does not explicitly mention that the pupil region corresponding of an eye of a human subject.

Enomoto, in analogous environment, teaches a method of detecting and correcting the red eye, where the pupil region corresponds to an eye of human subject (paragraph [007], line 3-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of Enomoto, where the pupil region corresponding to the eyes of the human subject, in the method of Kito in order of correcting the red eye with enhanced efficiency by performing unified processing in red eye detection and correction irrespective of the difference in type of an input image, that is to say, whether an input image is from the digital camera or from a film such as negative or positive film (paragraph [0011], line 4-8).

**(2) Regarding claim 2:**

Kito further disclose the image processing system (figure 7, column 1, line 14), where:

the storage component further stores therein information (column 13, line 15-16) which indicates a correction parameter (column 12, line 18-24) determined so as to correct undesirable color tone of the pupil region for the image in which the pupil region having undesirable color tone exists (column 8, line 11-12), (the pupil region having undesirable color tone is read as image data in association with the information), for each type of photographic device (column 8, line 10-15), (the storage component is read as an image memory); and

the processing component (26 in figure 1B) determines, based on the information (column 13, line 15-16) which indicates the correction parameter (column 12, line 18-24) acquired by the acquisition component (52 in figure 8, column 15, line 25-29), (the acquisition component is read as the controller), a correction parameter (column 12, line 18-24) applied to correction of undesirable color tone in the pupil region (column 8, line 11-12) extracted from the image to be processed (column 23, line 6-9).

**(3) Regarding claim 3:**

Kito further disclose the image processing (figure 7, column 1, line 14), where the storage component is connected to a plurality of image processors via a communication line (column 12, 7-11), (the plurality of image processors is read on image processing subsections; and the communication line is read on network delivery section), and stores therein information obtained in such a manner (column 8, line 10-

12) that correction of undesirable color tone in the pupil region for an image in which the pupil region having undesirable color tone exists is carried out by each of the plurality of image processors (column 13, line 45-53).

**(4) Regarding claim 5:**

Kito disclose the image processing apparatus (column 5, line 19) comprising:

a detecting component (12 b in figure 8) which detects the type of a photographing device in an image to be processed (column 14, line 15-17), which image is obtained by photographing a subject using the photographing device (16 in figure 1A, column 8, line 5-6), (the detecting component is read as the ID card);

an acquisition component (52 in figure 8) which acquires information corresponding to the type of the photographing device detected (ID information) by the detecting component (12 b in figure 8, column 15, line 25-29), (the acquisition component is read as the controller), from a storage component (20 in figure 1A) in which information indicates a rate of occurrence of a pupil region having undesirable color tone (column 8, line 11-12), (the pupil region having undesirable color tone is read as image data in association with the information), which information is obtained by correcting undesirable color tone of the pupil region for an image in which undesirable color tone exists among a large number of images (column 13, line 43-44) obtained by photographing the subject using a photographing device (16 in figure 1A, column 8, line 5-6), is stored for each type of photographing device (column 8, line 10-15), (the storage component is read as an image memory); and



a processing component (26 in figure 1B) which, when it is determined that the probability that the pupil region having undesirable color tone exists in an image to be processed is a predetermined value (column 13, line 32-35), (the probability is read on the image processing condition) or more based on the information acquired by the acquisition component (column 15, line 25-29), carries out searching for the pupil region having undesirable color tone in an image to be processed (column 8, line 37-38), (the searching for the pupil region is read on the processing of the image), and processing for correcting undesirable color tone of the pupil region (column 13, line 43-53) extracted by the searching (column 23, line 6-9).

Kito does not explicitly mention that the pupil region corresponding of an eye of a human subject.

Enomoto, in analogous environment, teaches a method of detecting and correcting the red eye, where the pupil region corresponds to an eye of human subject (paragraph [007], line 3-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of Enomoto, where the pupil region corresponding to the eyes of the human subject, in the method of Kito in order of correcting the red eye with enhanced efficiency by performing unified processing in red eye detection and correction irrespective of the difference in type of an input image, that is to say, whether an input image is from the digital camera or from a film such as negative or positive film (paragraph [0011], line 4-8).

**(5) Regarding claim 6:**

Kito further disclose the image processing apparatus (column 5, line 19), where:  
the storage component further stores therein information (column 13, line 15-16) which indicates a correction parameter (column 12, line 18-24) determined so as to correct undesirable color tone of the pupil region for the image in which the pupil region having undesirable color tone exists (column 8, line 11-12), (the pupil region having undesirable color tone is read as image data in association with the information), for each type of photographic device (column 8, line 10-15), (the storage component is read as an image memory); and  
the processing component (26 in figure 1B) determines, based on the information (column 13, line 15-16) which indicates the correction parameter (column 12, line 18-24) acquired by the acquisition component (52 in figure 8, column 15, line 25-29), (the acquisition component is read as the controller), a correction parameter (column 12, line 18-24) applied to correction of undesirable color tone in the pupil region (column 8, line 11-12) extracted from the image to be processed (column 23, line 6-9).

**(6) Regarding claim 8:**

Kito disclose all the subject matter as described in claim 1.

Kito does not explicitly mention that the processing is carried out by an operator, and making the determination of the red-eye correction whether the historical information is fixed level or more, and that the red eye region is a pupil region corresponding to the eyes of the human subject.

Enomoto, in analogous environment, teaches a method of detecting and correcting the red eye, where the processing is carried out by an operator (paragraph [0071], line 3-5), and the red eye correction is determined based on the specified color of pupil (paragraph [0012], line 4-12), where the red region is pupil region corresponding to the eyes of the human subject (paragraph [007], line 3-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of Enomoto, where the pupil region corresponding to the eyes of the human subject, in the method of Kito in order of correcting the red eye with enhanced efficiency by performing unified processing in red eye detection and correction irrespective of the difference in type of an input image, that is to say, whether an input image is from the digital camera or from a film such as negative or positive film (paragraph [0011], line 4-8).

**(7) Regarding claim 10:**

Kito further discloses the image processing method (column 6, line 42), further comprising the steps of:

determining a correction parameter for the image (column 12, line 18-24) in which the pupil region having undesirable color tone exists (column 8, line 11-12), (the pupil region having undesirable color tone is read as image data in association with the information) among a large number of images (column 6, line 47), (the large number of images is read as plurality of images), and correcting undesirable color tone of the pupil region using the determined correction parameter (column 8, line 11-12), and further storing information (column 13, line 15-16) indicating the determined correction

parameter in the storage component for each type of photographing device (column 8, line 10-15), (the storage component is read as an image memory); and

based on the information (column 13, line 15-16) indicating the correction parameter (column 12, line 18-24) and acquired from the storage component (column 8, line 10-15), determining a correction parameter (column 12, line 18-24) applied to correction of undesirable color tone in the pupil region (column 8, line 11-12) extracted from the image to be processed (column 23, line 6-9).

**(7) Regarding claim 11:**

Kito disclose all the subject matter as described in claim 9 above.

Kito does not explicitly mention the determination as to whether at least one of the pupil regions having undesirable color tone exist or not, and that the correction is carried out by an operator.

Enomoto, in analogous environment, teaches a method of detecting and correcting the red eye, where determining as to whether at least one of the pupil regions having undesirable color tone exist or not (paragraph [0077], line 2-6), (the existing or not of the undesirable color tone is read as the evaluation of the degree of roundness), and the correction is carried out by an operator (paragraph [0071], line 3-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the correcting method of the red eye of Enomoto in the system of Kito in order to provide a method of detecting and correcting the red eye with enhanced efficiency by performing unified processing in red eye detection and correction irrespective of the difference in type of an input image (input type), that is to

say, whether an input image is from a digital camera or from a film such as negative or positive film (paragraph [0011], line 4-8).

**(8) Regarding claim 12:**

Kito further discloses the image processing method (column 6, line 42), where the storage component (20 in figure 1A) is connected to a plurality of image processors (column 13, line 4) via a communication line (column 13, line 11-20), and stores therein information (column 13, line 15-16) obtained in such a manner that correction of undesirable color tone in the pupil region for an image in which the pupil region having undesirable color tone exists (column 8, line 11-12) is carried out by each of the plurality of image processors (column 12, line 18-24).

11. Claims 4,7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kito and Enomoto, as applies to claims 1,5, and 9, and further in view of Sannoh et al. (US PG-PUB 2003/0071908)

Kito and Enomoto disclose the entire subject as described in claims 1,5, and 9 above.

Kito and Enomoto do not explicitly mention that a human subject is photographed in a full-faces manner using an electronic flash, where the flash light is reflected by the eye portions of the human subject.

Sannoh et al., in an electronic flash control method and computer program, teaches the photographing of human subject in a full-face manner (paragraph [0071],

line 3-8) using an electronic flash (paragraph [0185], line 5-6), where the photographing intention can be reflected (paragraph [0190], line 12-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the electronic flash control method of Sannoh et al. in the system of Kito in order to be able to automatically judge whether a human object is to be photographed, without troubling the user, and be able to automatically emit light suitable for the human object photographing, and program for a computer to execute the method (paragraph [0016], line 3-7).

12. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kito in view of Marni (US 6,285,410).

**(1) Regarding claim 14:**

Kito discloses all the subject matter as described in claims 1 and 9 above.

Kito does not explicitly mention the computer data signal embodied in a carrier wave, where the data signal representing a control program that is readable by a controller of an image processing apparatus.

Marni, in analogous environment, teaches a method and system for removal of flash artifacts from digital images, where a communication device may be used to generate or receive a carrier wave modulated with a data signal, or function-extending program code that can be executed by the processing unit (column 10, line 25-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the carrier wave modulated with the signal data of Marni

system in the system of Kito in order for the operating system to be loaded from non-volatile storage into system memory by the processing unit, such as direct memory access controller. Sequences of instructions comprised by the operating system are then executed by the processing unit (column 10, line 41-50).

**(2) Regarding claim 15:**

Kito disclose all the subject matter as described in claim 14 above.

Kito does not explicitly mention the data signal, where the carrier wave is stored in a recording medium.

Marni, in analogous environment, teaches a method and system for removal of flash artifacts from digital images, where the carrier wave is modulated with the signal data (column 10, line 25-26), and the memory may include non-volatile storage such as computer readable medium (column 10, line 32-36), where the carrier wave is stored in the memory (column 10, line 36-37 and line 52-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the carrier wave modulated with the signal data of Marni system in the system of Kito in order for the operating system to be loaded from non-volatile storage into system memory by the processing unit, such as direct memory access controller. Sequences of instructions comprised by the operating system are then executed by the processing unit (column 10, line 41-50).

**Conclusion**

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Contact Information:**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Jingge can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Amara Abdi  
12/03/2007

  
JINGGE WU  
SUPERVISORY PATENT EXAMINER